

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re:	Application No. 10/581,624)	Confirmation No. 3716
Filed:	April 17, 2007)	
Applicants:	Stefan Ingrisich et al.)	This Communication was electronically filed on December 22, 2009 using the USPTO's EFS-Web.
Title:	AZETIDINE DERIVATIVES, METHOD FOR PRODUCING SAID DERIVATIVES AND USE THEREOF)	
Art Unit:	1796)	
Examiner:	Gregory Listvoyb)	
Attorney Docket:	8417/87870)	
Customer No.:	22242)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

COMMUNICATION

Sir:

Further to our telephone conversation on December 22, 2009, we hereby enclose a copy of Attachment A previously submitted with an Amendment filed on September 28, 2009.

The Commissioner is hereby authorized to charge any additional fees which may be required in this application under 37 C.F.R. §§ 1.16-1.17 during its entire pendency, or credit any overpayment, to Deposit Account No. 06-1135.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

Dated: December 22, 2009


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A series of papers demonstrates that azetidinium salt is the active species in the polymerization of *N*-substituted azetidines [117,176,179,180]. The initiation can occur by the use of proton acids or by the azetidinium salt prepared separately [179]. Table 7 lists rate constants and thermodynamic data for azetidine polymerizations [179].

The polymerization of azetidinols tends to yield low-molecular-weight polymers [169,180]. For example, in a study of the polymerization of 3-hydroxy-*N*-isopropylazetidine and 3-hydroxy-*N*-cyclohexylazetidine, regardless of initiator, DP_n was <20, M_n was typically 2000 or less, and the intrinsic viscosity was about 0.07 dL/g [180]. The termination or transfer reactions in azetidinol polymerization are not fully understood [179], although the polymer structures proposed are as follows:

